UI Bulletin #148e

Subject: **Upfitter (Aux) Switches (RPO 9L7)**

Models Affected: Chevrolet Silverado Medium Duty 4500/5500/6500
Model Years: 2019
Date: December 5, 2018
Revision Date: March 12, 2021

ADVISORY:

Condition/Concern:

For the all-new 2019 Chevrolet Silverado Medium Duty Trucks (4500HD, 5500HD, and 6500HD), built with the regular production option (RPO) 9L7 (auxiliary switch bank), this switch bank on the Silverado Medium Duty (4500/5500/6500 MD) replaces the standard switch bank located just below the Climate Controls (refer to figure 1) and is intended specifically for adding controlled features/functions from inside the cab. NOTE the Aux. switch positions/locations may change based on the added equipment on the vehicle and the available space for Aux. switches.

These switches are configurable such that they can provide either Battery or Ignition (Run/Crank) 12v+ outputs. The configuration is accomplished by the **RELOCATION** of two fuses in the both the LH and RH Fuse blocks. The configuration, be it for battery or ignition is done in pairs. Fuse placement will provide either the battery or ignition activation of the output relays for Button Positions 4 and 5* or Button Positions 6 and 7*, depending on the locations of the two fuses.

NOTE: For information regarding adding the switches to a vehicle not equipped see the latest revision of UI Bulletin 177.

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Switches/Relay outputs:

BUTTON 1	BUTTON 2	BUTTON 3	BUTTON 4	BUTTON 5	BUTTON 6	BUTTON 7
OFF		EXHAUST BRAKE		AUX1		AUX
VSES MOMENTARY W/O INDICATOR	CARGO LAMP MOMENTARY W/ INDICATOR	DIESEL EX. MOMENTARY W/ INDICATOR	PTO MOMENTARY W/O INDICATOR	AUX1 LATCHING W/ INDICATOR	SUSPENSION DUMP LATCHING W/ INDICATOR	LOW PRESSURE STATIC W/ INDICATOR

BUTTON 1	BUTTON 2	BUTTON 3	BUTTON 4	BUTTON 5	BUTTON 6	BUTTON 7
OFF		EXHAUST BRAKE		AUX1	AUX2	AUX3
VSES MOMENTARY W/O INDICATOR	CARGO LAMP MOMENTARY W/ INDICATOR	DIESEL EX. MOMENTARY W/ INDICATOR	PTO MOMENTARY W/O INDICATOR	AUX1 LATCHING W/ INDICATOR	AUX2 LATCHING W/ INDICATOR	AUX3 LATCHING W/ INDICATOR

BUTTON 1	BUTTON 2	BUTTON 3	BUTTON 4	BUTTON 5	BUTTON 6	BUTTON 7
OFF		EXHAUST BRAKE	AUX1	AUX2		AUX
VSES MOMENTARY W/O INDICATOR	CARGO LAMP MOMENTARY W/ INDICATOR	DIESEL EX. MOMENTARY W/ INDICATOR	AUX1 LATCHING W/ INDICATOR	AUX2 LATCHING W/ INDICATOR	SUSPENSION DUMP LATCHING W/ INDICATOR	LOW PRESSURE STATIC W/ INDICATOR

BUTTON 1	BUTTON 2	BUTTON 3	BUTTON 4	BUTTON 5	BUTTON 6	BUTTON 7
OFF		EXHAUST BRAKE	AUX1	AUX2	AUX3	AUX4
VSES MOMENTARY W/O INDICATOR	CARGO LAMP MOMENTARY W/ INDICATOR	DIESEL EX. MOMENTARY W/ INDICATOR	AUX1 LATCHING W/ INDICATOR	AUX2 LATCHING W/ INDICATOR	AUX3 LATCHING W/ INDICATOR	AUX4 LATCHING W/ INDICATOR

The outputs from the switches are located inside the cab into the EFI Junction Block (IECM (X61A)). Refer to Figure 2

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Figure 2

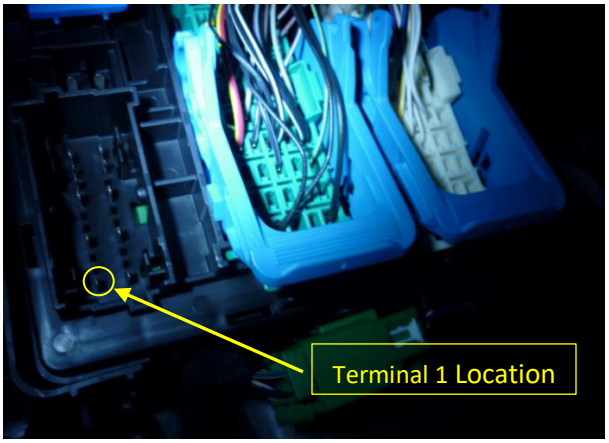

Figure 3

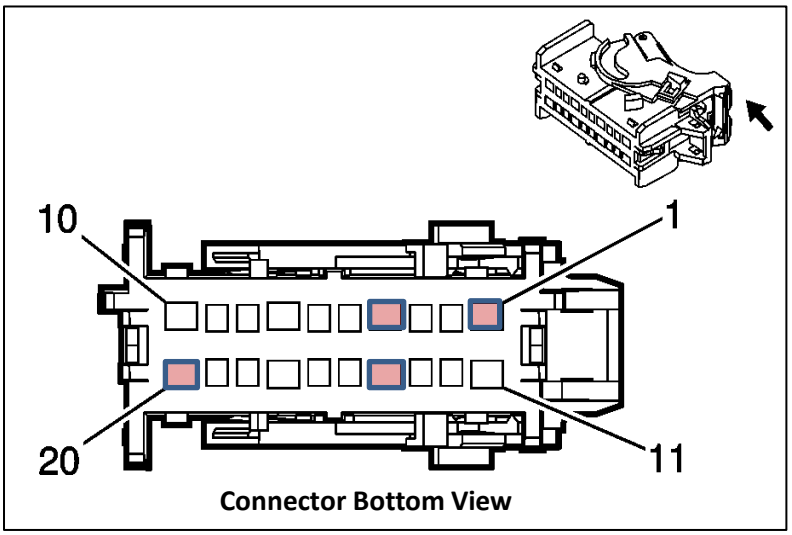

Figure 4

Pin #1, 4, 14 and 20 are used for Upfitter added/configured circuits

General Motors Upfitter Integration

http://www.gmupfitter.com

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Connector Part Information

- Harness Type: Upfitter
- OEM Connector: 15547108 (This connector is available through an after-market supplier http://www.terminalsandconnectors.com/)
- Service Connector: Kit P/N 19328970 Includes Connector body and Lock Lever
- Description: 20-Way F 1.5, 2.8 Series (BK)

Terminal Part Information

Terminal Type ID	Terminated Lead	Diagnostic Test Probe	Terminal Removal Tool	Service Terminal	Tray	Core Crimp	Insulation Crimp
I	13575832	J-35616-35 (VT)	J-38125-11A	7116-4112-02	9	C	D
II	13578892	J-35616-2A (GY)	J-38125-11A	7116-4101-08	9	E	A

Refer to the connector pin–out table for connector and terminal part number information (next page).

Available for order at GM dealers…dealers need to order on a DRO (Daily Replenishment Order)

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X61A Junction Block - Instrument Panel X7

Pin	Circuit	Function/Fuse Rating	Terminal Type ID	Option
1	968	Upfitter Provision (30amp) Aux Switch 4 output	I	9L7
2-3	-	Not Occupied	-	-
4	967	Upfitter Provision (30amp) Aux Switch 3 output	I	9L7
5-6	-	Not Occupied	-	-
7	2340	Battery Positive Voltage (15 amp)	I	-
8	43	Accessory Voltage (10 amp)	II	-
9	5060	Low Speed GMLAN Serial Data	II	-
10	1050	Ground	I	-
11	1939	Run/Crank Ignition 1 Voltage (15 amp)	I	-
12-13	-	Not Occupied	-	-
14	966	Upfitter Provision (30amp) Aux Switch 2 output	I	9L7
15-16	-	Not Occupied	-	-
17	2340	Battery Positive Voltage (15 amp)	I	-
18	-	Not Occupied	-	-
19	817	Vehicle Speed Signal (4k PPM)	II	-
20	965	Upfitter Provision (30amp) Aux Switch 1 Output	I	9L7

Note: The yellow shaded terminals are available signals for Upfitter usage.

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Fuse Block-Instrument Panel Left - X51L

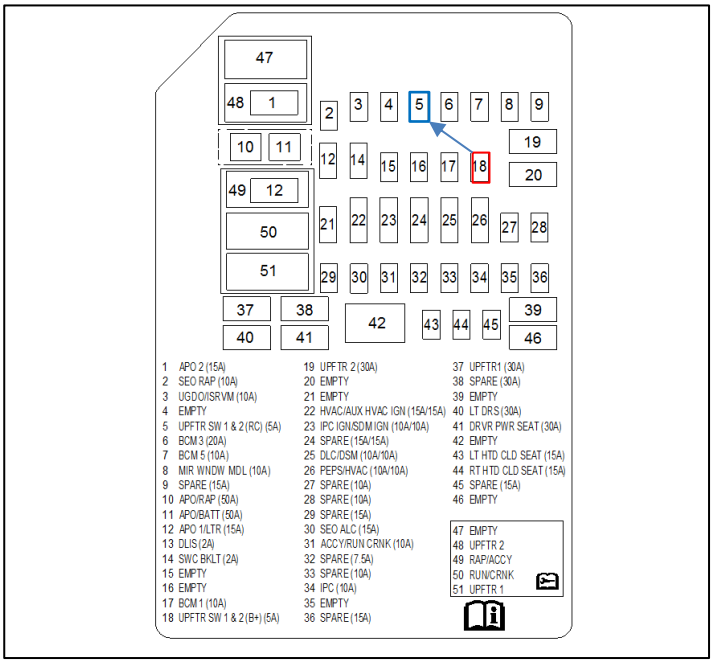

Figure 5

NOTE: The **RED** squared area in Figure 5 reflects the factory default (battery powered) locations for Button Positions 4 and 5*. The **BLUE** squared area in Figure 5 reflects the reconfigured (Ign. Run/Crank powered) locations for Button Positions 4 and 5*

To reconfigure Button Positions 4 and 7*to operate only when the ignition is in the Run/Crank mode, simply relocate the 5-amp fuse from location 18 to that of location 5.

NOTE: do **NOT** populate both fuse 5 and fuse 18 locations at the same time.

Fuse Block-Instrument Panel Right-X51R

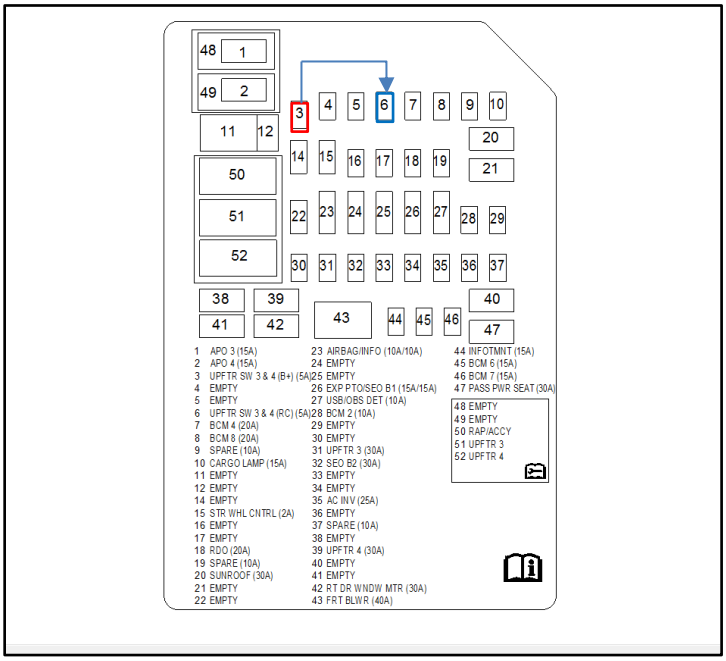

Figure 6

NOTE: The **RED** squared area in Figure 5 reflects the factory default (battery powered) locations for Button Positions 6 and 7*. The **BLUE** squared area in Figure 5 reflects the reconfigured (Ign. Run/Crank powered) locations for Button Positions 6 and 7*.

To reconfigure Button Positions 6 and 7* to operate only when the ignition is in the Run/Crank mode, simply relocate the 5-amp fuse from location 3 to that of location 6.

NOTE: do **NOT** populate both fuse 3 and fuse 6 locations at the same time.

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Wire Harness Pass-thru location

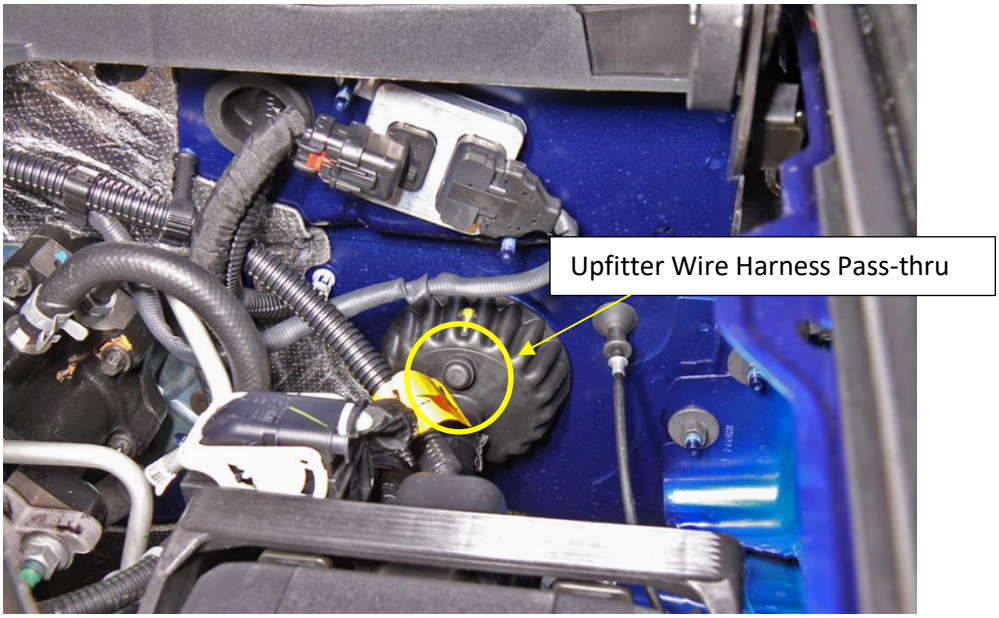

Figure 11

Figure 11 shows the location of the upfitter wire harness pass through

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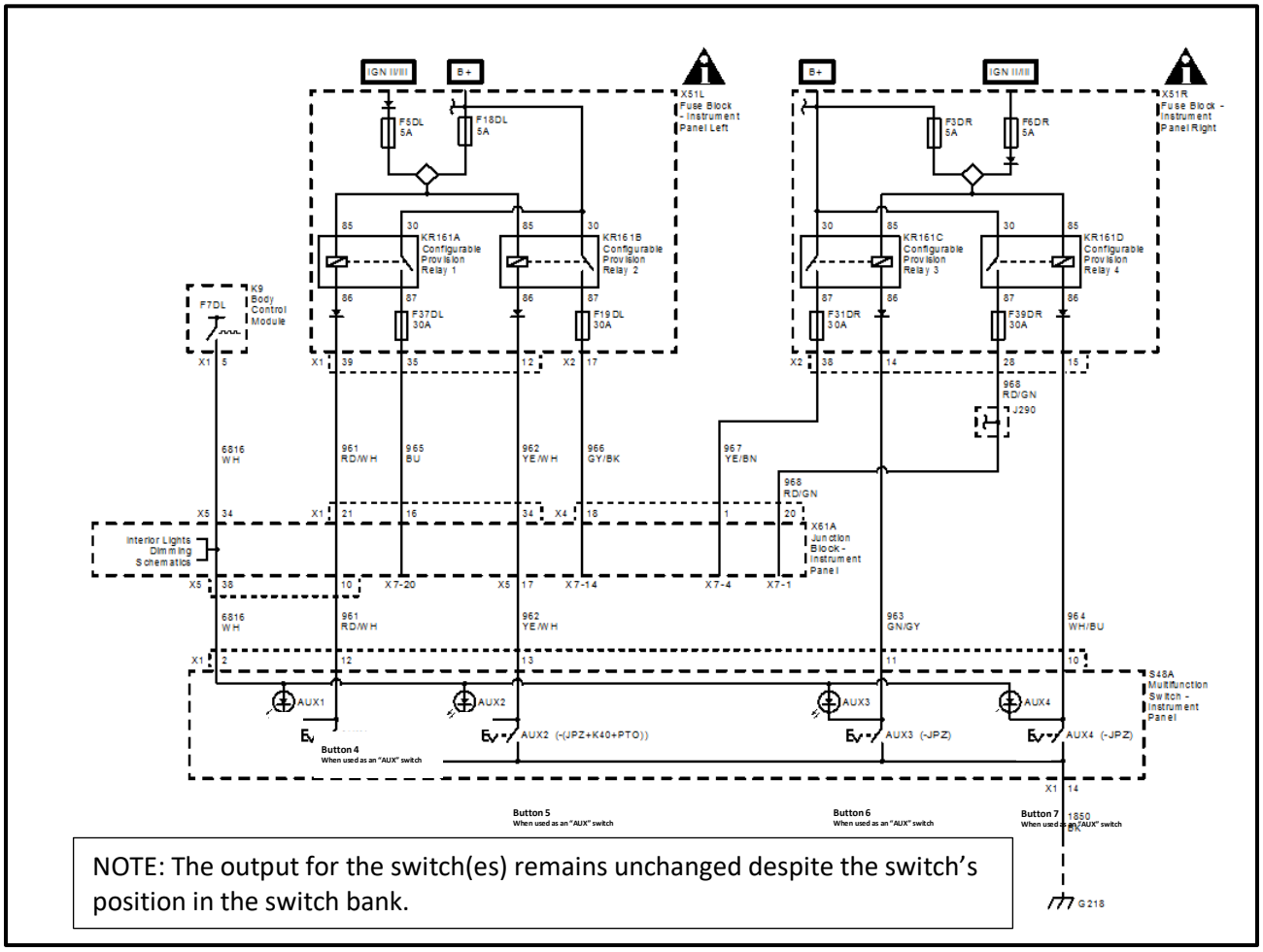
Wiring Schematic

Upfitter Provisions at Junction Block - Instrument Panel (9L7)



NOTE: The output for the switch(es) remains unchanged despite the switch's position in the switch bank.

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